

Remarks/ Arguments

In response to the Office Action mailed August 26, 2004, Applicants respectfully request that the Examiner reconsider the objections to the specification and the claims.

Claims 19 - 23 remain.

Claims 19, 22, and 23 are being amended.

Claims 19 - 23 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point and distinctly claim the subject matter Applicants regard as inventive. Claims 19 – 23 have been amended, as set forth above, to remedy the instances of lack of antecedent basis identified by the Examiner.

Claims 19 - 23 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Segawa et al.* (U.S. Patent 5,523,721) (hereinafter the *Segawa* reference), in further view of *Williams* (U.S. Patent 5,249,225) (hereinafter "the *Williams* reference"). Applicants respectfully traverse these rejections.

In particular, neither the *Segawa* reference nor the *Williams* references, alone or in combination, teaches or suggests a multiple stage attenuator having a first stage including a first amplifier and a tapped resistor having an input for receiving data, an output coupled to an output of the first amplifier, and a plurality of taps for presenting voltages to the non – inverting input of the first amplifier. Furthermore, the *Segawa* and *Williams* references, either taken alone or in combination, do not teach or suggest a second stage including a second amplifier and a tapped resistor coupling an output of the first stage and an output of the second amplifier, and having a plurality of taps for presenting voltages to the non – inverting input of the second amplifier. Finally, the *Segawa* and *Williams* references, either taken either alone or in combination, do not disclose the feature of a second stage that steps the attenuation from a starting value

to an intermediate value and a first stage that steps the attenuation from the intermediate value to an ending value.

Specifically, Figure 3 of the *Segawa* reference, cited by the Examiner only shows a single amplifier (10) in which an input resistor network (9) is coupled to a data input V_{in} and the non-inverting terminal of amplifier (10), and a separate resistor network (12) is coupled to the inverting terminal of amplifier (10) and the amplifier output V_{out} . Neither Input resistor network (9) nor output resistor network (12) is coupled to both the data input V_{in} and the output of amplifier 10.

Contrary to the Examiner's assertion, Figure 7 of the *Williams* reference does not disclose a multiple – stage attenuator. Instead, Figure 7 discloses a circuit for combining balancing impedances for synthesizing complex impedance functions. (The *Williams* reference, Col. 8, Lines 25 – 36.). Furthermore, while Figure 7 of the *Williams* reference discloses multiple amplifiers, it does not show either a first amplifier and a tapped resistor having an input for receiving data, an output coupled to an output of the first amplifier, and taps for presenting voltages to the noninverting input of the first amplifier, or a second amplifier and a tapped resistor coupling an output of the first stage and an output of the second amplifier, and taps presenting voltages of a noninverting input of the second amplifier. Specifically, the variable resistors 20 shown in Figure 7 of the *Williams* reference only include an input coupled to the output of a input amplifier (19), an output coupled to ground, and a tap point coupled to the non – inverting input of an amplifier (21).

Additionally, since the *Williams* reference does not disclose a multiple – stage attenuator, it consequently also does not teach or suggest a multiple – stage attenuator in which a second stage steps the attenuation from a starting value to an intermediate value and a first stage steps the attenuation from the intermediate value to an ending value.

Applicants therefore respectfully submit that the rejections of Claims 19 - 23 as obvious in view of the *Segawa* and *Williams* references should be withdrawn.

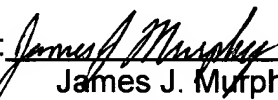
No new matter has been added; the claims have been merely amended to more particularly claim the subject matter Applicants believe is inventive. Applicants respectfully submit that the Claims as they now stand are patentably distinct over the art cited during the prosecution thereof.

Applicant respectfully requests a First Month Extension of Time to File this Response. Enclosed with this paper is Form PTO/SB/22 with Extension Fees in the amount of \$120.00 as reflected on the PTO/SB/17 Fee Transmittal.

With the addition of no new claims, no additional filing fees are due. However, the Commissioner is hereby authorized to charge any fees or credit any overpayment to Deposit Account Number 20-0821 of Thompson & Knight LLP.

If the Examiner has any questions or comments concerning this paper or the present application in general, the Examiner is invited to call the undersigned at (214) 969 - 1749.

Respectfully submitted,
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